

In the Claims

Claims 4-5, 9, 14-15, 19, 22-28 and 33-35 have been cancelled without prejudice.

Claims 1-3, 7-8, 10-13, 17-18, 20-21, 31-32, 36 and 39 have been amended as follows:

1. (Presently Amended) A communication entity ~~for compressing messages transmitted using a communication protocol, said communication entity~~ comprising:

a dictionary containing text of at least one field name associated with a communication protocol including at least one of a Session Initiation Protocol (SIP) and a Session Description Protocol (SDP) at least one symbol string therein, said at least one symbol string corresponding to at least one symbol of a given communication protocol; and

a compressor in communication with said dictionary, said compressor using said dictionary to compress a data packet associated with at least one of a SIP message and a SDP message by replacing at least one field name therein that matches the text of the at least one field name stored within said dictionary with a pointer to a location in said dictionary that contains the matched text ~~said at least one symbol string within a first communication message pursuant to said given communication protocol.~~

2. (Presently Amended) The communication entity of claim 1, said communication entity further comprising:

a decompressor in communication with said dictionary, said decompressor using said dictionary to decompress a compressed data packet received from a remote communication entity at least one symbol string within a second communication message pursuant to said given communication protocol.

3. (Presently Amended) The communication entity of claim 1, wherein said communication entity also uses another compression scheme to further compress the compressed data packet further comprising: a binary code tree in communication with said compressor, said compressor using said binary code tree to compress said at least one symbol string within said first communication message pursuant to said given communication protocol.

Claims 4-5 (Cancelled).

6. (Original) The communication entity of claim 1, wherein said dictionary comprises a static dictionary.

7. (Presently Amended) The communication entity of claim 1, wherein said dictionary comprises a dynamic dictionary at least one symbol of said given communication protocol comprises at least one field name of said given communication protocol.

8. (Presently Amended) The communication entity of claim 1, wherein said at least one field name that has text stored in said dictionary was selected at least one entry within said dictionary is based upon statistical data flows of said ~~given communication protocol.~~

Claim 9 (Cancelled)

10. (Presently Amended) The communication entity of claim ~~3~~ 9, wherein said another compression scheme is compressor uses a sliding window dictionary compression method.

11. (Presently Amended) A communication entity ~~for decompressing messages received using a communication protocol, said communication entity~~ comprising:

a dictionary containing text of at least one field name associated with a communication protocol including at least one of a Session Initiation Protocol (SIP) and a Session Description Protocol (SDP) at least one symbol string therein, said at least one symbol string corresponding to at least one symbol of a given communication protocol; and

a decompressor in communication with said dictionary, said decompressor using said dictionary to decompress a data packet associated with at least one of a SIP message and a SDP message by using at least one pointer in the data packet to locate text associated with the at least one field name stored in the dictionary and then replacing the at least one pointer with the text associated with the at least one field name within the data packet ~~said at least one symbol string within a first communication message pursuant to said given communication protocol.~~

12. (Presently Amended) The communication entity of claim 11, said communication entity further comprising:

a compressor in communication with said dictionary, said compressor using said dictionary to compress a data packet to be sent to a remote communication entity at least one symbol string within a second communication message pursuant to said given communication protocol.

13. (Presently Amended) The communication entity of claim 11, wherein said communication entity also uses another decompression scheme to further decompress the data packet further comprising: a binary code tree in communication with said decompressor, said decompressor using said binary code tree to decompress said at least one symbol string within said first communication message pursuant to said given communication protocol.

Claims 14-15 (Cancelled)

16. (Original) The communication entity of claim 11, wherein said dictionary comprises a static dictionary.

17. (Presently Amended) The communication entity of claim ~~11~~ 4, wherein said dictionary comprises a dynamic dictionary said at least one symbol of said given communication protocol comprises at least one field name of said given communication protocol

18. (Presently Amended) The communication entity of claim 11, wherein said at least one field name that has text stored in said static dictionary was selected wherein at least one entry within said dictionary is based upon statistical data flows of said given communication protocol.

Claim 19 (Cancelled)

20. (Presently Amended) The communication entity of claim ~~13~~ 49, wherein said another decompression scheme is decompressor uses a sliding window dictionary decompression method.

21. (Presently Amended) A communication system for facilitating compressed message communication, said communication system comprising:

a first communication entity ~~for sending a first communication message, said first communication entity~~ comprising:

a first dictionary containing text of at least one field name associated with a communication protocol including at least one of a Session Initiation Protocol (SIP) and a Session Description Protocol (SDP); and

a compressor in communication with said first dictionary, said compressor using said first dictionary to compress a data packet associated with at least one of a SIP message and a SDP message by

replacing at least one field name therein that matches the text of the at least one field name stored within said dictionary with a pointer to a location in said first dictionary that contains the matched text; and

~~a first dictionary containing at least one symbol string therein, said at least one symbol string corresponding to at least one symbol of a given communication protocol; and a first compressor in communication with said first dictionary, said first compressor using said first dictionary to compress a given symbol string within a first communication message pursuant to said given communication protocol; and~~

~~a second communication entity, in communication with said first communication entity, for receiving said first communication message, said second communication entity comprising:~~

~~a second dictionary containing text of at least one field name associated with the communication protocol including at least one of the Session Initiation Protocol (SIP) and the Session Description Protocol (SDP); and~~

~~a decompressor in communication with said second dictionary, said decompressor using said second dictionary to decompress a compressed data packet received from said first communication entity by using at least one pointer in the compressed data packet to locate text associated with the at least one field name stored in the second dictionary and then replacing the at least one pointer with the text associated with the at least one field name within the compressed data packet a second dictionary containing at least one symbol string therein, said at least one symbol string corresponding to said at least one symbol of said given communication protocol; and a first decompressor, in communication with said second dictionary, said first decompressor using said second dictionary to decompress said given symbol string within said first communication message pursuant to said given communication protocol, said first dictionary being substantially equivalent to said second dictionary.~~

Claims 22-28 (Canceled)

29. (Original) The communication system of claim 21, wherein said first dictionary comprises a static dictionary.

30. (Original) The communication system of claim 21, wherein said second dictionary comprises a static dictionary.

31. (Presently Amended) The communication system of claim 21 24, wherein said first ~~third~~ dictionary comprises a dynamic static dictionary.

32. (Presently Amended) The communication system of claim 21 ~~25~~, wherein said second ~~fourth~~ dictionary comprises a dynamic ~~static~~ dictionary.

Claims 33-35 (Canceled)

36. (Presently Amended) A method of facilitating compressed message communication using a communication protocol including at least one of a Session Initiation Protocol (SIP) and a Session Description Protocol (SDP), said method comprising the steps of:

searching a dictionary for text of a field name that matches text of a field name ~~a symbol string~~ ~~corresponding to said communication protocol, said symbol string being contained within~~ at least one of a SIP communication message and a SDP communication message;

upon affirmative confirmation that said dictionary contained said matched text of the field name ~~contains said symbol string~~, retrieving from said dictionary a pointer associated with a location in said dictionary that stores the matched text of the field name ~~compressed symbol string associated with said symbol string~~;

replacing, in said communication message, said text of the field name with said pointer ~~symbol string with said compressed symbol string~~; and

transmitting said compressed communication message using said communication protocol.

37. (Original) The method of claim 36, wherein said dictionary comprises a static dictionary.

38. (Original) The method of claim 36, wherein said dictionary comprises a dynamic dictionary.

39. (Presently Amended) A method of facilitating compressed message communication using a communication protocol including at least one of a Session Initiation Protocol (SIP) and a Session Description Protocol (SDP), said method comprising the steps of:

receiving a SIP or a SDP communication message based upon said communication protocol, said communication message including a pointer ~~compressed symbol string~~;

retrieving from a dictionary, text of a field name which is stored within said dictionary at a location identified by said pointer ~~an uncompressed symbol string associated with said compressed symbol string, said uncompressed symbol string corresponding to said communication protocol~~; and

replacing, in said communication message, said pointer with the text of the field name ~~compressed symbol string with said uncompressed symbol string~~.

40. (Original) The method of claim 39, wherein said dictionary comprises a static dictionary.
41. (Original) The method of claim 39, wherein said dictionary comprises a dynamic dictionary.